



# FUTURE FISHERIES IMPROVEMENT PROGRAM GRANT APPLICATION

*All sections must be addressed, or the application will be considered invalid*



## I. APPLICANT INFORMATION

- A. Applicant Name: Clark Fork Coalition
- Mailing Address: Box 7593
- City: Missoula State: MT Zip: 59807
- Telephone: 406-396-7716 E-mail: will@clarkfork.org
- B. Contact Person (if different than applicant): same
- Address: \_\_\_\_\_
- City: \_\_\_\_\_ State: \_\_\_\_\_ Zip: \_\_\_\_\_
- Telephone: \_\_\_\_\_ E-mail: \_\_\_\_\_
- C. Landowner and/or Lessee Name (if different than applicant): US Forest Service, Beaverhead Deer Lodge National Forest
- Mailing Address: 88 Business Loop
- City: Philipsburg State: MT Zip: 59858
- Telephone: 406-925-9777 E-mail: phooper@fs.fed.us

## II. PROJECT INFORMATION

- A. Project Name: Little Gold Creek Aquatic Organism Passage (AOP) Road 8501
- River, stream, or lake: Little Gold Creek, Boulder Creek drainage-Flint Creek watershed
- Location: Township: T8N Range: R12W Section: 29
- Latitude: 46.4132 Longitude: -113.1334 *within project (decimal degrees)*
- County: Granite
- B. Purpose of Project:

The purpose of the project is to provide fish passage upstream into the upper two miles of Little Gold Creek for cold-water fish species, particularly westslope cutthroat and bull trout, improving habitat quantity and connectivity in an important native fish watershed.

## C. Brief Project Description (attach additional information to end of application):

Design and install a new fish-passage friendly culvert on FS Road 8501 at Little Gold Creek, a tributary to Boulder Creek near Maxville, in the Beaverhead Deer Lodge National Forest (BVDL).

Boulder Creek is a 70-square mile tributary watershed to Flint Creek, draining steep forested lands within the Beaverhead Deer Lodge National Forest, Pintler Ranger District. The Boulder Creek drainage is the only Flint Creek tributary with **viable populations of both bull trout and westslope cutthroat trout**. Little Gold Creek is a three-mile long tributary to Boulder Creek. This project would install a new culvert on USFS Road 8501 on lower Little Gold Creek, opening two miles of this drainage to reconnection with the Boulder Creek native fish populations.

The current culvert on lower Little Gold Creek is undersized, and has a dramatic 3.5-foot drop at its outlet, cutting off all chances of upstream fish passage. Replacing this culvert with an Aquatic Organism Passage (AOP) culvert design, and providing sufficient culvert capacity to pass a 100-year flood event, is a USFS priority project (Pintler Ranger District). The Project will help accomplish the USFS "Conservation Strategy for Bull Trout on USFS lands in Western Montana," and the "Memorandum of Understanding and Conservation Agreement for Westslope Cutthroat Trout and Yellowstone Cutthroat Trout in Montana."

The existing round culvert is 40 feet long and is 60 inches in diameter. This culvert is a fish passage barrier due to its small size, steep slope (6%), and severe drop-off at culvert outlet. This culvert is undersized for flood events, which could damage the stream and this major forest road.

The USFS has begun design calculations for this Project. They propose a new AOP culvert (natural stream channel inside culvert) 60 feet long, 11.5 feet wide and 7.2 feet tall, capable of passing a 100-year flow of 123 cfs. Culvert slope will be approximately 6 percent, similar to the existing channel. Final design is underway by USFS and will be complete by mid-summer 2020. The AOP design will include a stream bed top width of 7-feet, with natural stream bed gravels held in place by eight rock weirs built with 24" angular rock.

The USFS Pintler Ranger District fish biologist invited Clark Fork Coalition (CFC) to participate in this project. The Pintler Ranger District and the CFC have successfully collaborated on several other AOP culvert structure projects from 2011 to 2019. The project will proceed according to the following steps: 1) The US Forest Service will complete the survey, fish passage analysis and design of the culvert in house in 2020. 2) The USFS will sign an agreement obligating funding and requiring the Clark Fork Coalition (CFC) to raise additional match funds and provide project management, in coordination with both the Engineering and Aquatics programs at Beaverhead Deer Lodge National Forest. 3) The designs will go through review and 124 permitting by Montana FWP, 4) the CFC will prepare a bid package, and advertise for private construction firms to bid on replacing the structure. A qualified contractor will be selected through a competitive process in coordination with the USFS. 5) Once a contract is in place, the CFC will provide oversight of construction, in coordination with the Aquatics and Engineering staff at BDNF.

The Clark Fork Coalition has been working with the USFS, Watershed Restoration Coalition (WRC), Natural Resource Damage Program, FWP, and private landowners to address all the limiting factors for native trout in Boulder Creek watershed since 2011 (4 large projects have been completed, including 2 habitat projects on private land, 1 bridge and one series of new AOP culverts). Prior to that, the USFS completed several significant mine reclamation projects in this watershed. Water quality and aquatic/riparian habitat conditions are generally excellent.

D. Length of stream or size of lake that will be treated (project extent): 100 feet

Length/size of impact, if larger than project extent (e.g. stream miles opened): Two miles

E. Project Budget:

**Grant Request (Dollars): \$ 29,475**

Matching Dollars: \$ 40,714

Matching In-Kind Services:\* \$ 7,820

*\*salaries of government employees are not considered matching contributions*

**Total Project Cost: \$ 78,709**

F. **Attach** itemized (line item) budget – see *budget template*

G. **Attach** specific project plans, detailed sketches, plan views, photographs, maps, evidence of landowner consent, evidence of public support and fish biologist support, and/or other information necessary to evaluate the merits of the project. If project involves water leasing or water salvage complete a *supplemental questionnaire* ([fwp.mt.gov/habitat/futurefisheries/supplement2.doc](http://fwp.mt.gov/habitat/futurefisheries/supplement2.doc)).

H. **Attach** land management & maintenance plans that will ensure protection of the reclaimed area.

III. **PROJECT BENEFITS** (attach additional information to end of application):

A. What species of fish will benefit from this project?

Westslope cutthroat trout and bull trout will benefit from this project. Westslope cutthroat have been sampled several times in this reach, and cold-water fish habitat above the culvert appears good. Bull trout were detected by eDNA sampling in the Little Gold Creek drainage by USFS in 2018.

B. How will the project protect or enhance wild fish habitat?

This project will open over 2 miles of excellent high-elevation cold-water habitat to native trout. Montana FWP has documented native trout populations declining and withdrawing upstream as water temperatures increase in western Montana. Little Gold Creek can provide high quality cold-water habitat at over 6000 feet elevation to use by the native fish in the Boulder Creek drainage, essentially providing a cold-water refuge habitat if conditions, particularly stream temperatures deteriorate downstream.

C. Will the project improve fish populations and/or fishing? To what extent?

The Little Gold Creek channel above the culvert currently has low fish populations. Opening over two miles of high-quality habitat above this culvert will increase access to high-quality habitat, and potentially increase numbers of west-slope cutthroat trout and bull trout. Boulder Creek is the ONLY creek in the Flint Creek drainage that retains a functional bull trout population. Increasing potential habitat for bull trout could be important to that species survival in the Flint Creek watershed.

- D. Will the project increase public fishing opportunity for wild fish and, if so, how?

Small stream fishing for cutthroat trout is available on all USFS land in the drainage. Although Little Gold Creek itself is mostly a steep forested stream, there are segments of Boulder Creek on USFS land near the confluence of Little Gold Creek where fishing for cutthroats is quite viable.

- E. The project agreement includes a 20-year maintenance commitment. Please discuss your ability to meet this commitment.

The maintenance for the new AOP culvert falls on the USFS road maintenance program, which is responsible for Road 8501. This road is a major travel route in the Flint Creek mountains of the Pintler Ranger District, for both wheeled and over-snow travel, so USFS will maintain this new infrastructure.

- F. What was the cause of habitat degradation in the area of this project and how will the project correct the cause?

The existing culvert is dramatically undersized for this drainage. The concentration of hydraulic force during high-flow events has down-cut the stream below the culvert, exacerbating the disconnection between the culvert outlet and the stream channel downstream.

There is a private hydropower intake about 600 yards upstream of the culvert. After a large flood event damaged that facility in 2017, the owner installed some temporary diversion structures which are not fish-friendly, and which need to be upgraded. The USFS is planning to require upgrades to that system, through their Special Use Permit, to facilitate better fish passage.

- G. What public benefits will be realized from this project?

The public will benefit by the expansion of connected, high-quality cold-water habitat for fish and other aquatic life on public lands.

- H. Will the project interfere with water or property rights of adjacent landowners? (explain):

No, there are no property rights or water rights implications.

- I. Will the project result in the development of commercial recreational use on the site? (explain):

No, but public recreation in this drainage is already allowed by USFS.

- J. Is this project associated with the reclamation of past mining activity?

No.

**Each approved project applicant must enter into a written agreement with Montana Fish, Wildlife & Parks specifying terms and duration of the project. The applicant must obtain all applicable permits prior to project construction. A competitive bid process must be followed when using State funds.**

#### IV. AUTHORIZING STATEMENT

I (we) hereby declare that the information and all statements to this application are true, complete, and accurate to the best of my (our) knowledge and that the project or activity complies with rules of the Future Fisheries Improvement Program.

Applicant Signature:  Date: May 31, 2020

Sponsor (if applicable): n/a

Submittal: **Applications must be signed and received before December 1 and June 1 of each year to be considered for the subsequent funding period.** Late or incomplete applications will be rejected.

Mail to: Montana FWP Fish Management Bureau PO Box 200701 Helena, MT 59620-0701	Email: Michelle McGree <a href="mailto:mmcgree@mt.gov">mmcgree@mt.gov</a> (electronic submissions must be signed) For files over 10MB, use <a href="https://transfer.mt.gov">https://transfer.mt.gov</a>
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*Applications may be rejected if this form is modified.*

Little Gold Creek fish passage  
BUDGET TEMPLATE SHEET FOR FUTURE FISHERIES PROGRAM APPLICATIONS

017-2020

Little Gold Creek AOP USFS Road 8501

WORK ITEMS (ITEMIZE BY CATEGORY)	NUMBER OF UNITS	UNIT DESCRIPTION*	COST/UNIT	TOTAL COST	CONTRIBUTIONS			
					FUTURE FISHERIES REQUEST	IN-KIND SERVICES**	IN-KIND CASH	TOTAL
<b>Personnel***</b>								
Survey	1.5	crew day	\$1,000.00	\$ 1,500.00	-	1,500.00	2,400.00	\$ 1,500.00
Design	9	days	\$300.00	\$ 2,700.00		2,700.00		\$ 2,700.00
Engineering				\$ -				\$ -
Permitting	4	day	\$480.00	\$ 1,920.00		1,920.00		\$ 1,920.00
Oversight	10	days	\$480.00	\$ 4,800.00		1,700.00		\$ 4,800.00
				\$ -				\$ -
			Sub-Total	\$ 10,920.00	\$ -	\$ 7,820.00	2,400.00	\$ 10,920.00
<b>Travel</b>								
Mileage	720	miles	\$0.58	\$ 414.00			414.00	\$ 414.00
Per diem				\$ -				\$ -
			Sub-Total	\$ 414.00	\$ -	\$ -	\$ 414.00	\$ 414.00
<b>Construction Materials****</b>								
Structure excavation & backfill	500	CY	\$35.00	\$ 17,500.00			17,500.00	\$ 17,500.00
Bedding material (furnish & place)	75	CY	\$45.00	\$ 3,375.00	3,375.00			\$ 3,375.00
Furnish & place riprap (Class 4)	60	CY	\$75.00	\$ 4,500.00	4,500.00			\$ 4,500.00
10 rock cross vanes furnish & built	40	CY	\$80.00	\$ 3,200.00	3,200.00			\$ 3,200.00
Crush road aggregate furnished/ compacted	70	CY	\$40.00	\$ 2,800.00	2,800.00			\$ 2,800.00
137"x87"x60' arch culvert	60	ft	\$260.00	\$ 15,600.00	15,600.00			\$ 15,600.00
				\$ -				\$ -
				\$ -				\$ -
			Sub-Total	\$ 46,975.00	\$ 29,475.00	\$ -	\$ 17,500.00	\$ 46,975.00
<b>Equipment and Labor</b>								
Trakhoe Excavator	1	day	\$1,400.00	\$ 1,400.00			1,400.00	\$ 1,400.00
Dump truck	1	day	\$600.00	\$ 600.00			600.00	\$ 600.00
Skid steer small	1	day	\$400.00	\$ 400.00			400.00	\$ 400.00

Little Gold Creek fish passage  
**BUDGET TEMPLATE SHEET FOR FUTURE FISHERIES PROGRAM APPLICATIONS**

017-2020

Water Diversion & pumping/ erosion control	1		\$5,000.00	\$ 4,000.00			4,000.00	\$ 4,000.00
Haul and install 137"x87"x60' culvert	1	lump		\$9,000			9,000.00	\$ 9,000.00
				\$ -				\$ -
			Sub-Total	\$ 15,400.00	\$ -	\$ -	\$ 15,400.00	\$ 15,400.00
<b>Mobilization</b>								
Mobilize	1	lump		\$ 5,000.00			5,000.00	\$ 5,000.00
				\$ -				\$ -
			Sub-Total	\$ 5,000.00	\$ -	\$ -	\$ 5,000.00	\$ 5,000.00
<b>TOTALS</b>					\$ 29,475.00	\$ 7,820.00	\$ 40,714.00	\$ 78,709.00

**OTHER REQUIREMENTS:**

**All of the columns in the budget table and the matching contribution table MUST be completed appropriately or the application will be invalid.** Please see the example budget sheet for additional clarification.

\*Units = feet, hours, inches, etc. Do not use lump sum unless there is no other way to describe the costs.

\*\*Can include in-kind materials. Justification for in-kind labor (e.g. hourly rates used for calculations). Describe here or in text.

Reminder: Government salaries cannot be used as in-kind match

\*\*\*The Review Panel suggests that design and oversight costs associated with a proposed project not exceed 15% of the total project budget. If design and oversight costs are in excess of 15%, applications must include a minimum of two competitive bids for the cost of undertaking the project.

\*\*\*\*The Review Panel recommends a maximum fencing cost of \$1.50 per foot. Additional costs may be the responsibility of the applicant and/or partners.

**MATCHING CONTRIBUTIONS** (do not include requested funds)

CONTRIBUTOR	IN-KIND SERVICE	IN-KIND CASH	TOTAL	Secured? (Y/N)
US Forest Service (Survey, Design, Permits)	\$ 7,820.00	\$ -	\$ 7,820.00	yes
US Forest Service (RAC grant to CFC)	\$ -	\$ 40,714.00	\$ 40,714.00	no
	\$ -	\$ -	\$ -	
	\$ -	\$ -	\$ -	
	\$ -	\$ -	\$ -	
	\$ -	\$ -	\$ -	
<b>TOTALS</b>	\$ 7,820.00	\$ 40,714.00	\$ 48,534.00	



**ATTACHMENT:** Future Fisheries Grant Application, May 31, 2020. **LITTLE GOLD CREEK.** Clark Fork Coalition.



Outlet of culvert at Little Gold Creek on USFS Road 85 in Boulder-Flint drainage. Drop is 3.5 feet vertical. Several trout were seen in the outlet pool during the survey in May 2020.



Future Fisheries  
Little Boulder Creek AOP NFS Road 8501.

May 31, 2020

The Beaverhead-Deerlodge National Forest would like to offer our support for Clark Fork Coalition (CFC) Future Fisheries grant proposal for the Little Gold Creek Aquatic Organism Passage (AOP).

Little Gold Creek is a tributary to Boulder Creek on the Pintler Ranger District. The stream contains both resident native westslope cutthroat trout and bull trout. Boulder Creek is considered Critical Habitat for the recovery of the threatened bull trout.

This project will connect the upper reaches of Little Gold Creek with the main stem of Boulder Creek. Past surveying shows that fish are found at low densities above the culvert on NFS Road 8501. Fisheries habitat above the AOP is considered good. Connecting the area with the main stem of Boulder Creek has the potential to populate the reaches above the culvert with bull trout.

Future fisheries founding will greatly increase the opportunity to implant the proposed AOP. The CFC and Pintler Ranger District have had a great relationship contracting and implanting projects. This founding will continue our continued management and enhancement of native fisheries in the upper Clark Fork River Basin.

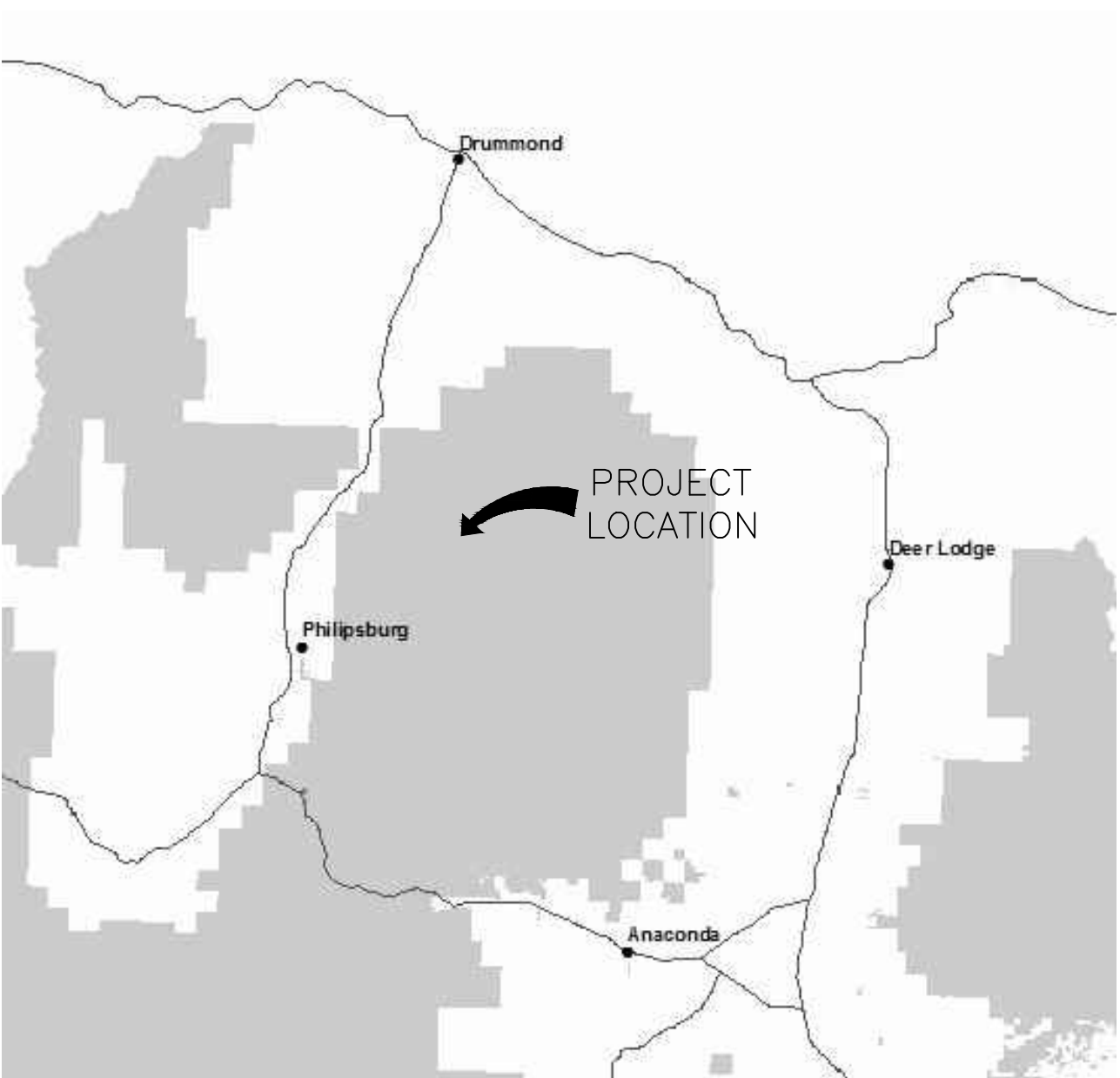
Sincerely,



Paul Hooper  
West Zone Fisheries Biologist  
Beaverhead-Deerlodge National Forest



U.S. FOREST SERVICE  
BEAVERHEAD–DEERLODGE NATIONAL FOREST  
PINTLER RANGER DISTRICT  
LITTLE GOLD CREEK CULVERT – TYPICALS  
NFSR 8501 MP 1.1



VICINITY MAP  
NO SCALE

DRAWING INDEX

SHEET NO.	TITLE
A2	EXISTING CULVERT SITE LAYOUT (TYP)
A3	EXISTING CULVERT PLAN & PROFILE (TYP)
A4	NEW CULVERT PLAN & PROFILE (TYP)
A5	NEW CULVERT CROSS SECTION (TYP)
A6	NEW CULVERT ROCK WEIR (TYP)



UNITED STATES DEPARTMENT OF AGRICULTURE  
FOREST SERVICE  
BEAVERHEAD–DEERLODGE NF – MONTANA

LITTLE GOLD CREEK CULVERT  
NFSR 8501 MP 1.1  
VICINITY MAP, SITE PLAN  
AND DRAWING INDEX (TYPICALS)

DESIGNED: E.RYAN	DRAWN: E.RYAN	CHECKED: --
DATE: 05/2020	DRAWING NO. ---	SHEET 1 OF 6





NOTES: EXISTING SITE CONDITIONS (TYPICAL)

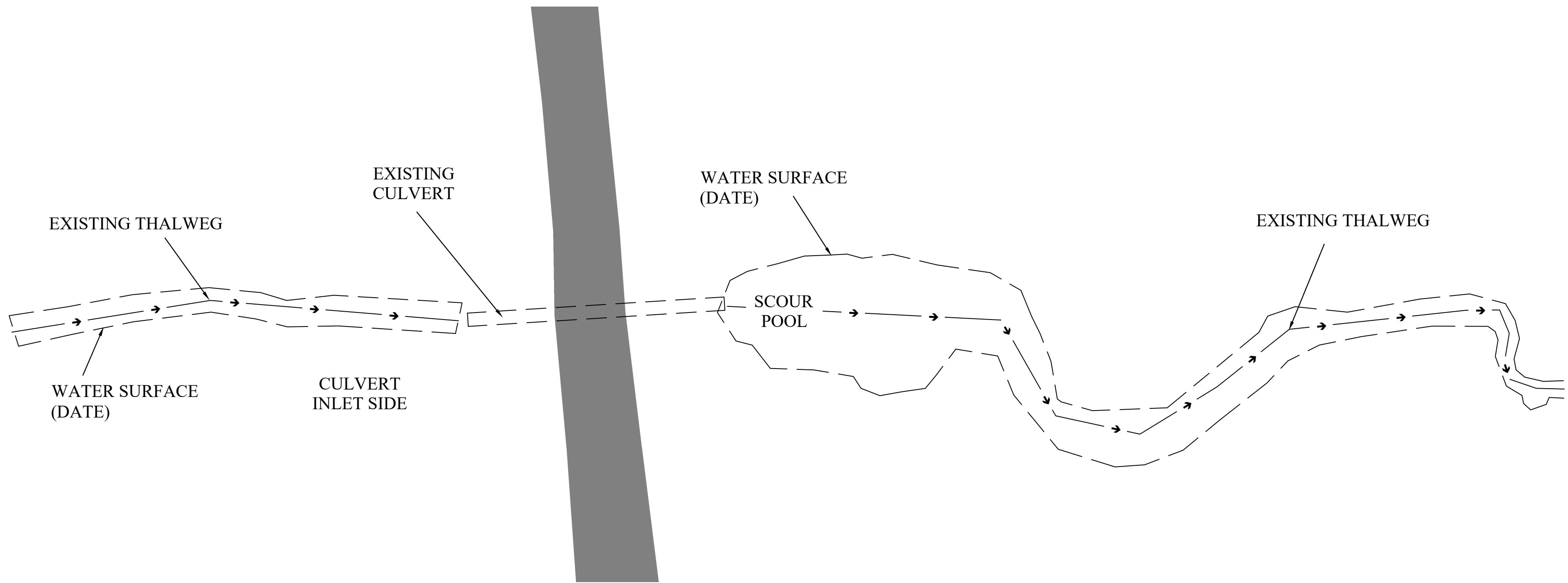
- 1.) TYPICAL NOTES INCLUDE LAT/LONG LOCATION AND ANY TEMPORARY BENCHMARK INFORMATION. INCLUDE ANY KNOWN SITE SPECIFIC CONSIDERATIONS.

EXISTING SITE PHOTO PLACEHOLDER

PHOTO CAPTION

EXISTING SITE  
NO SCALE

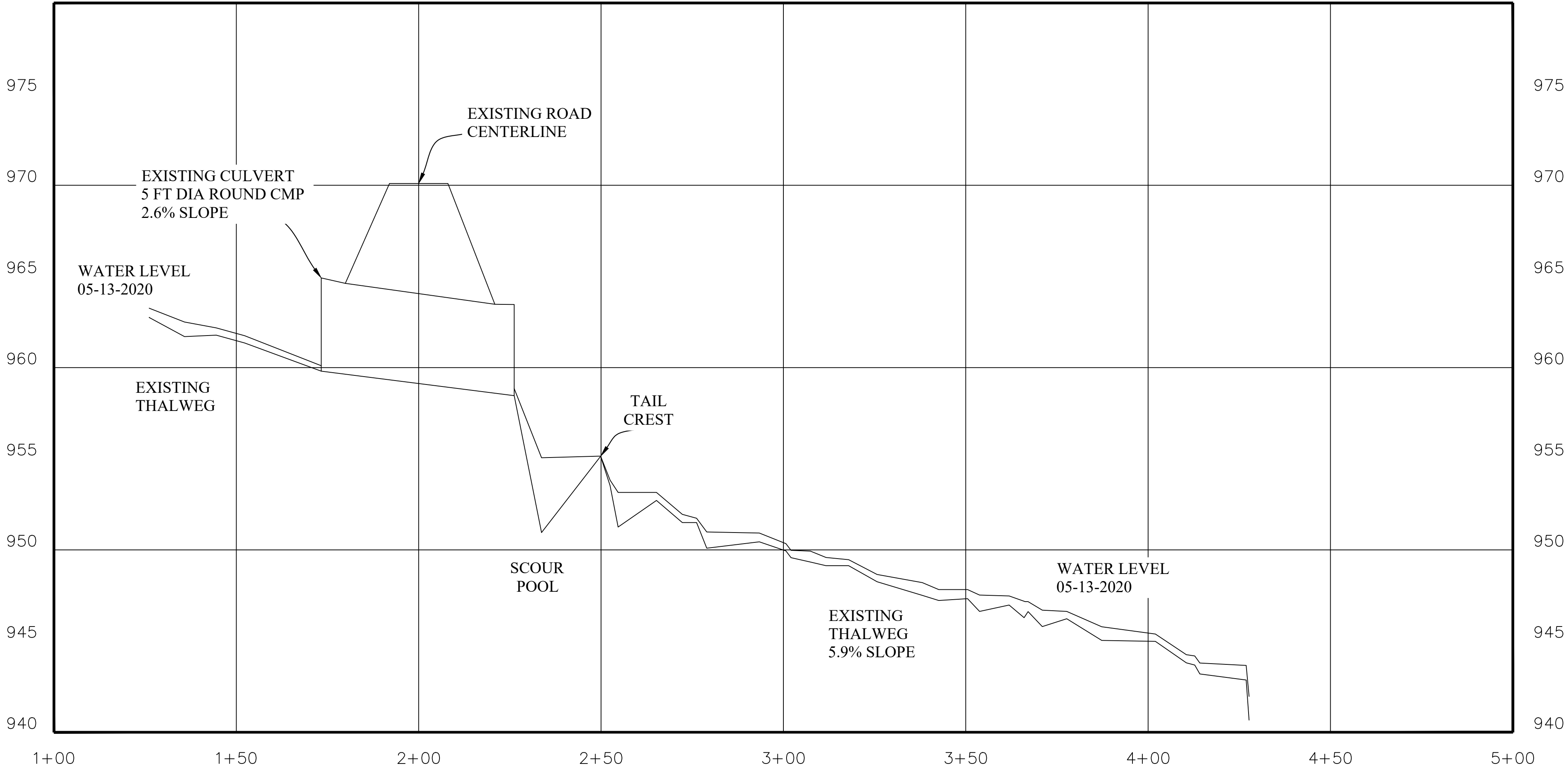
LITTLE GOLD CREEK NFSR 8501 MP 1.1				EXISTING CULVERT SITE LAYOUT (TYP)		SUB-SHEET A2
BEAVERHEAD-DEERLODGE NATIONAL FOREST						
DESIGNED E.RYAN	DRAWN E.RYAN	CHECKED --	DATE 05/2020	DRAWING NO. ---	SHEET 2 OF 6	



EXISTING PLAN VIEW (TYPICAL)  
SCALE: X"=X'

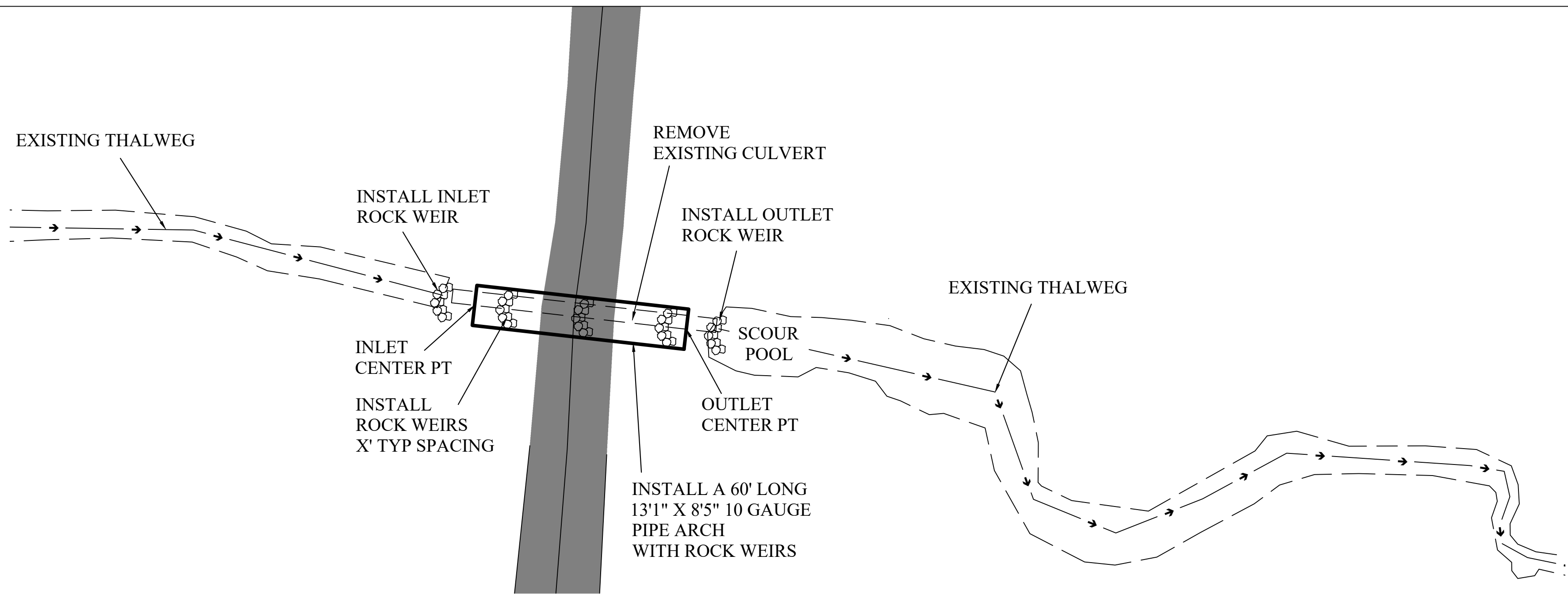
NOTES: EXISTING CONDITIONS (TYPICAL)

- 1.) TOP OF ROAD XXX.XX'±XX, WIDTH: APPROXIMATELY XX'
- 2.) EXISTING XX" DIAMETER, XX' LONG CULVERT  
INVERT IN (EAST) = XXXX.XX'  
INVERT OUT (WEST) = XXXX.XX'
- 3.) CHANNEL WIDTH UPSTREAM OF CULVERT: XX' TO XX'
- 4.) CHANNEL WIDTH DOWNSTREAM OF CULVERT: XX' TO XX'
- 5.) NO INFORMATION ON ROAD BASE
- 6.) ROAD SURFACE= XXX



EXISTING PROFILE VIEW

LITTLE GOLD CREEK NFSR 8501 MP 1.1 BEAVERHEAD-DEERLODGE NATIONAL FOREST					EXISTING CULVERT PLAN & PROFILE (TYP)		SUB-SHEET A3
DESIGNED E.RYAN	DRAWN E.RYAN	CHECKED ---	DATE 05/2020	DRAWING NO. ---	SHEET 3 OF 6		



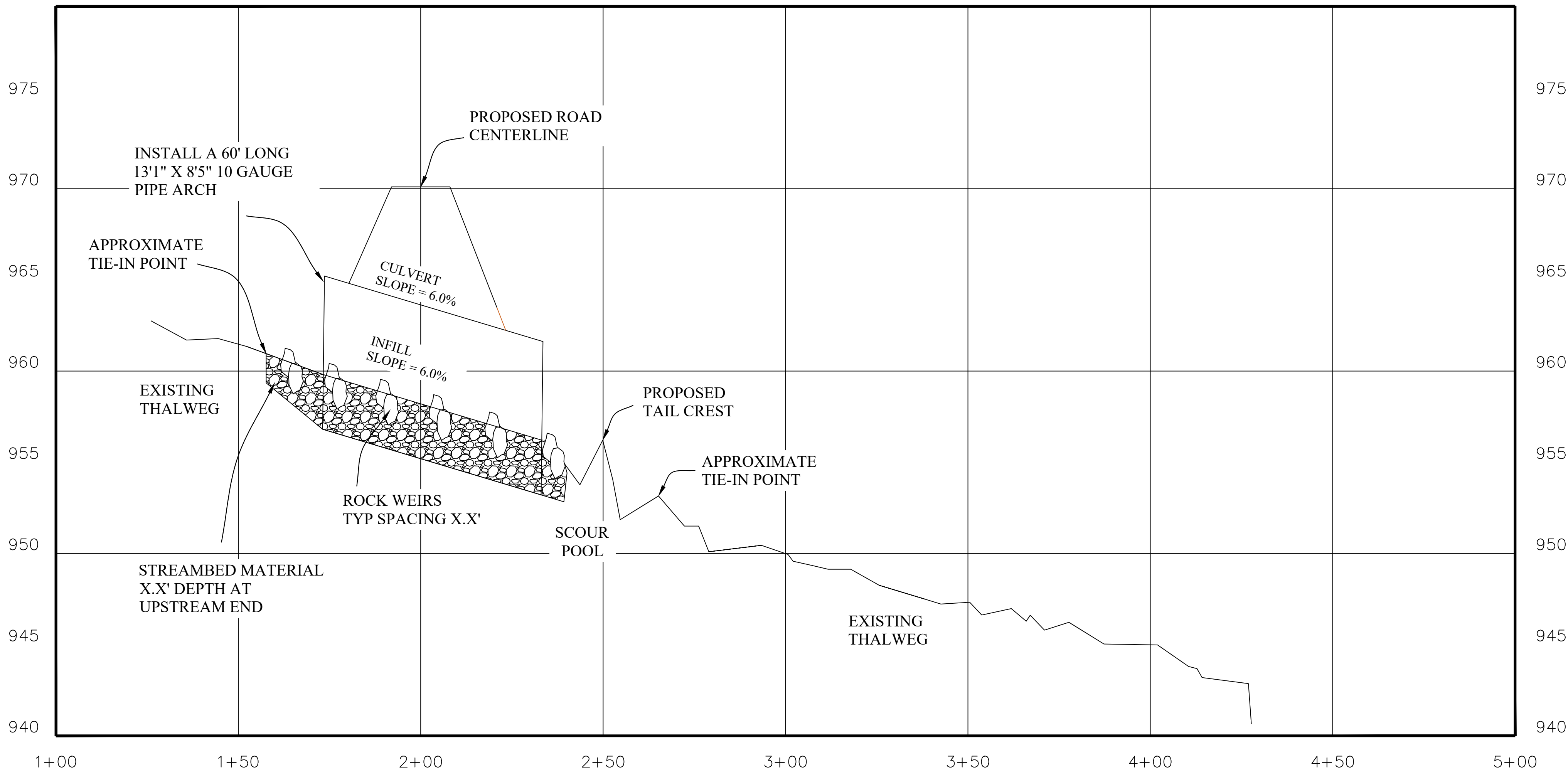
CULVERT PLAN VIEW (TYPICAL)  
SCALE: X"=XX'

NOTES: (TYPICAL)

- 1.) ORIGINAL XX INCH DIAMETER CULVERT TO BE REMOVED AND DISPOSED OF AT A PERMITTED FACILITY.
- 2.) CALL BEFORE YOU DIG - UTILITIES MAY EXIST AT THE ROAD CROSSING.
- 3.) CULVERT LAYOUT TO BE FIELD VERIFIED BY FIELD ENGINEER PRIOR TO BEING BACKFILLED.
- 4.) EXISTING ROAD GRADE IS TO BE RECONSTRUCTED TO ITS ORIGINAL ELEVATION AND RE-ALIGNED PER DRAWINGS.
- 5.) NEW CULVERT MATERIAL: SEE SPECIFICATIONS SECTION 334213 (PIPE CULVERTS).
- 6.) APPROXIMATE TIE-IN LOCATIONS WILL BE DETERMINED BY FIELD ENGINEER ON SITE.

NEW CULVERT SUMMARY TABLE

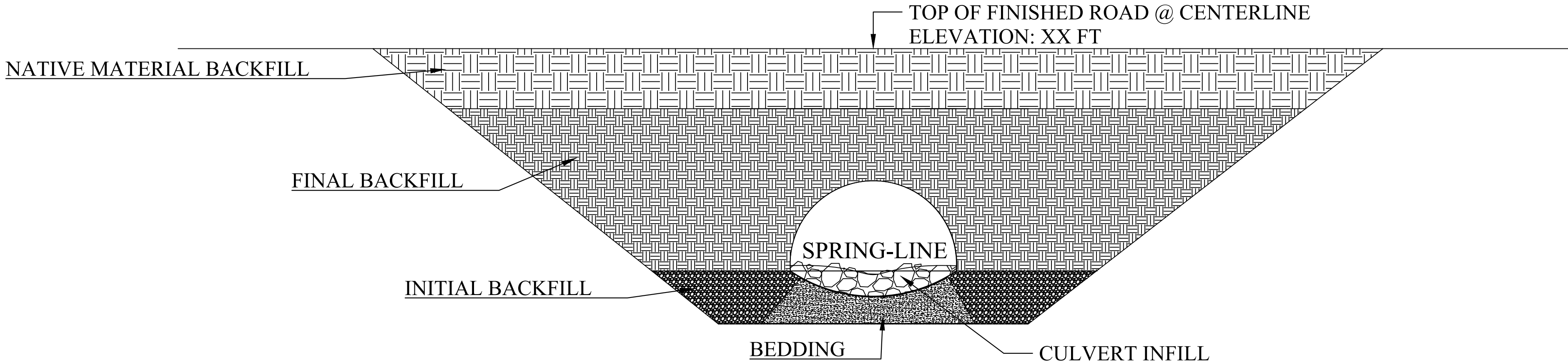
TYPE	PIPE ARCH
SIZE	13'-1" X 8'-5"
LENGTH	60'-0"
SLOPE	6.0 %
CORRUGATION	5" X 1" OR 3" X 1"
MATERIAL	STEEL
PLATE THICKNESS	10 GAUGE



CULVERT PROFILE VIEW

LITTLE GOLD CREEK NFSR 8501 MP 1.1 BEAVERHEAD-DEERLODGE NATIONAL FOREST				NEW CULVERT PLAN & PROFILE (TYP)		SUB-SHEET A4
DESIGNED E.RYAN	DRAWN E.RYAN	CHECKED --	DATE 05/2020	DRAWING NO. ---	SHEET 4 OF 6	





CULVERT CROSS SECTION A - A' (TYPICAL)

NOT TO SCALE

NOTES: CULVERT EMBEDMENT (TYPICAL)

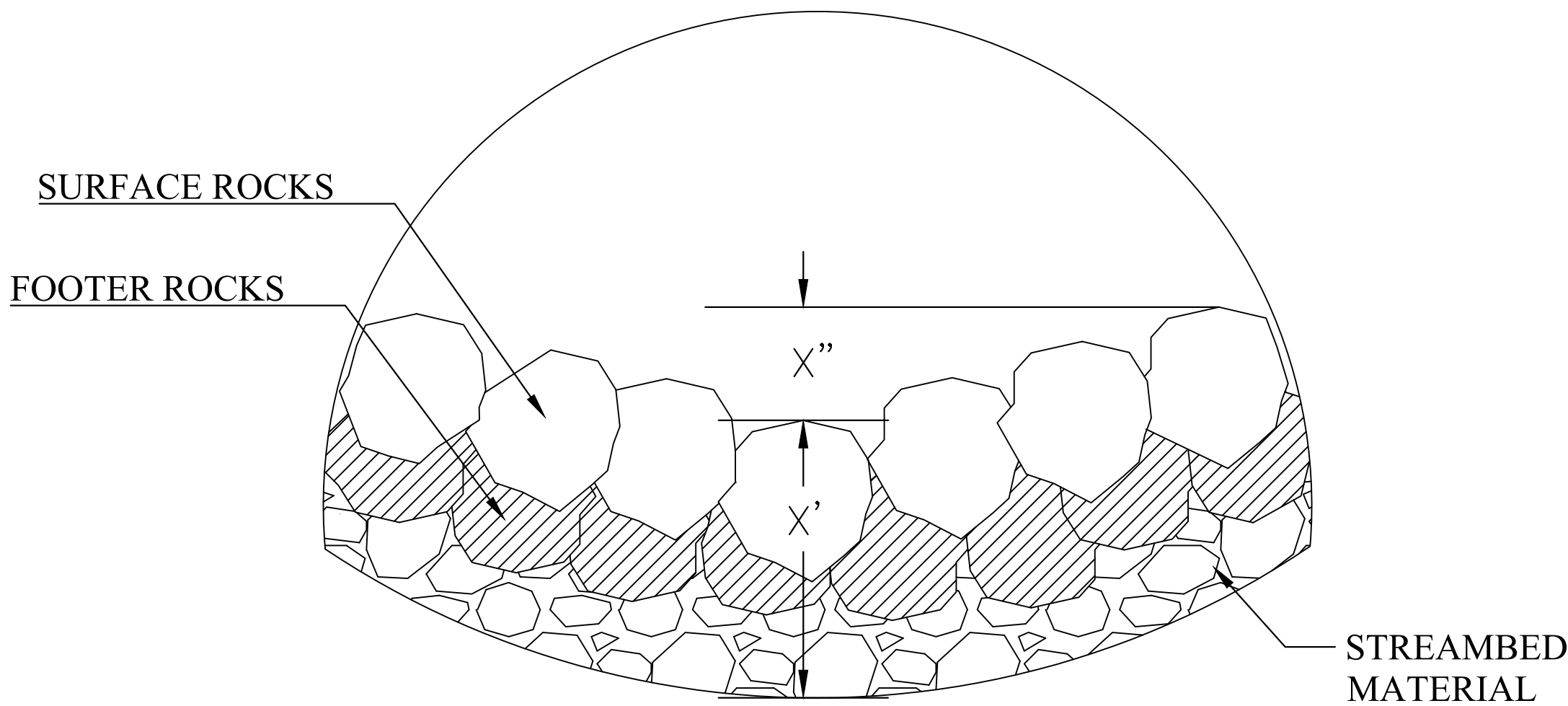
PIPE ARCH BEDDING & BACKFILL

- 1.) A YIELDING FOUNDATION UNDER THE CULVERT INVERT IN CONJUNCTION WITH WELL COMPACTED GRANULAR MATERIAL UP TO THE SPRING-LINE IS ESSENTIAL FOR PIPE ARCH CULVERT INSTALLATIONS.
- 2.) BEDDING: BEDDING IS CONSTRUCTED BY EXCAVATING 6" BELOW THE CULVERT INVERT ELEVATION AND BACKFILLING WILL WELL-GRADED GRANULAR MATERIAL MEETING REQUIREMENTS OF AASHTO A-3.
- 3.) INITIAL BACKFILL CULVERT INVERT TO SPRING-LINE: SEE SPECIFICATION SECTION 31200 (EARTH MOVING) AND SPECIFICATION SECTION 334213 (PIPE CULVERT).
- 4.) FINAL BACKFILL (SPRING-LINE TO 1' ABOVE PIPE CROWNS): SEE SPECIFICATION SECTION 31200 (EARTH MOVING) AND SPECIFICATION SECTION 334213 (PIPE CULVERT).
- 5.) NATIVE MATERIAL BACKFILL: BACKFILL REMAINDER OF TRENCH WITH NATIVE MATERIAL EXCAVATED DURING CULVERT REMOVAL. COMPACT TO BACKFILL STANDARDS.
- 6.) COMPACTED BACKFILL MATERIAL MUST EXTEND TO TRENCH WALL OR TO COMPACTED EMBANKMENT.
- 7.) CULVERT INFILL MATERIAL CONSISTS OF 2 PARTS BY VOLUME BONE ROCK (TABLE 7) AND 1 PART BY VOLUME STREAM MATERIAL (TABLE 2). MIX MATERIAL ONSITE TO AVOID SEGREGATION BEFORE PLACING IN CULVERT.
- 8.) ENGINEER TO APPROVE INFILL MATERIAL PRIOR TO PLACEMENT. NOTIFY ENGINEER AT LEAST 48 HOURS IN ADVANCE.
- 9.) CONSTRUCT INFILL MATERIAL LEAVING A ROUGH SURFACE.
- 10.) SELECT (X.X'-X.X') DIAMETER ROCK FOR SURFACE/FOOTER ROCK PLACEMENT. EMBED AND SPACE ACCORDING TO DRAWINGS AND AS DIRECTED BY ENGINEER (SEE SHEET A6).

TABLE 1. BONE ROCK	
% PASSING	MATERIAL SIZE
D100	X"
D85	X"
D50	X"
D30	X"
D15	X"

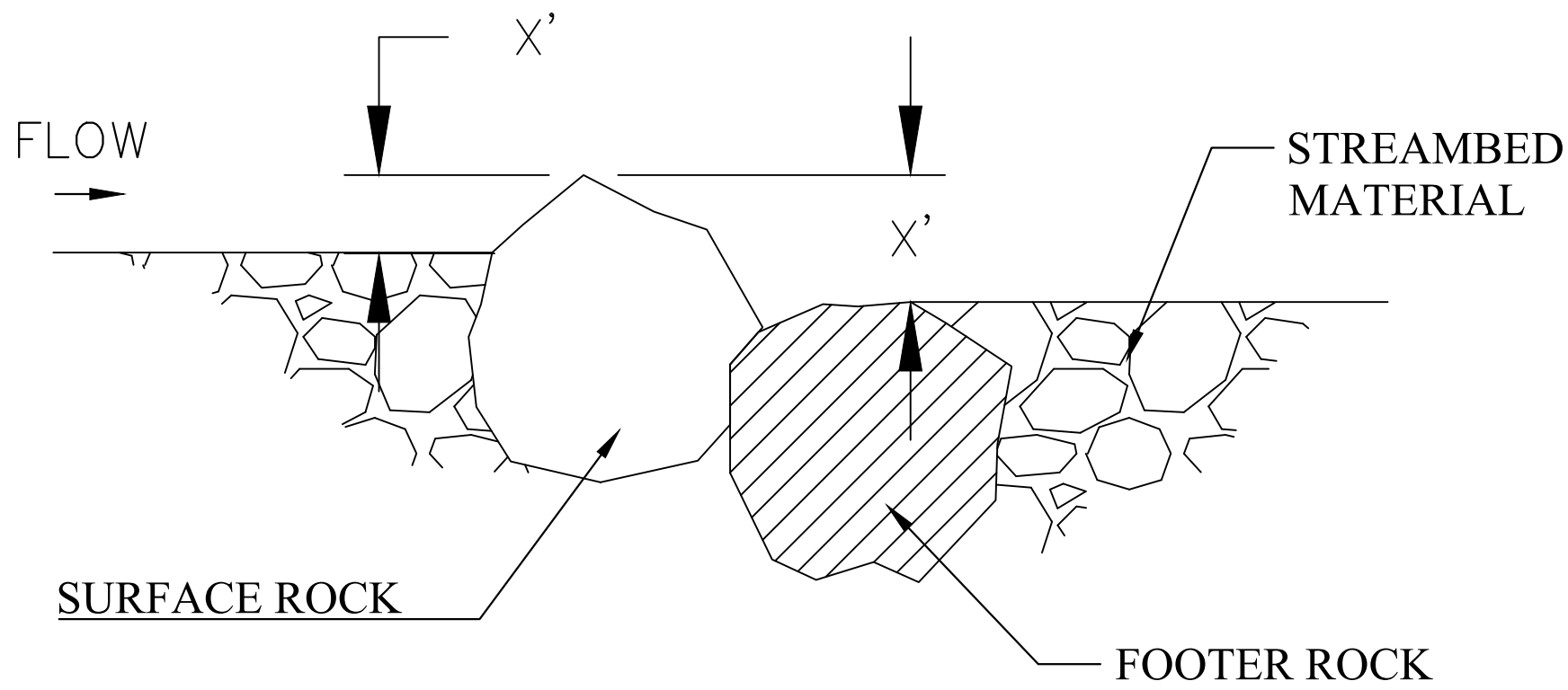
TABLE 2. STREAM MATERIAL	
% PASSING	MATERIAL SIZE
D100	X"
D85	X"
D50	X"
D30	$\frac{X}{X}$ "
D15	X
D10	X





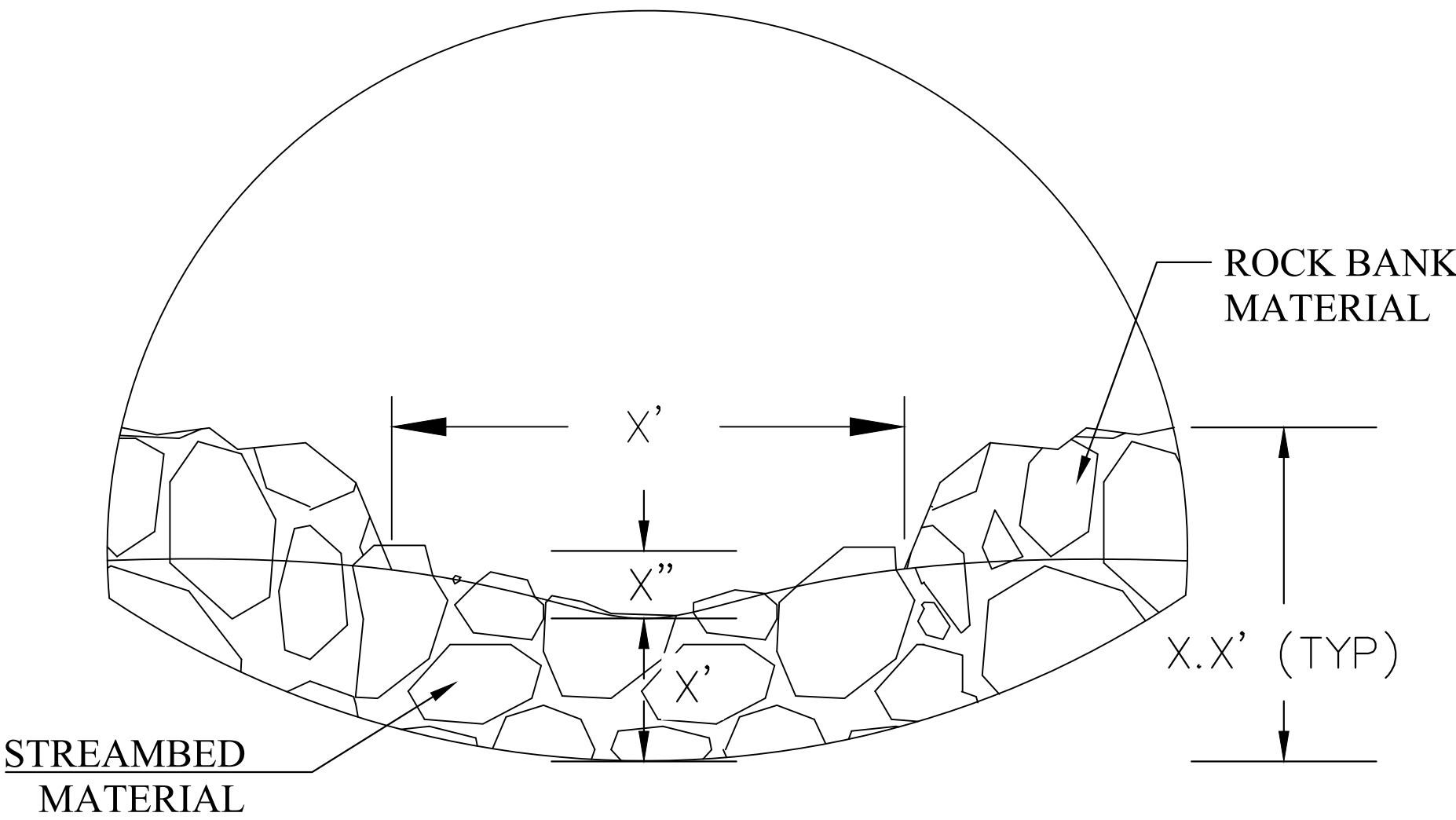
**ROCK WEIR CROSS SECTION C - C' (TYPICAL)**

NOT TO SCALE



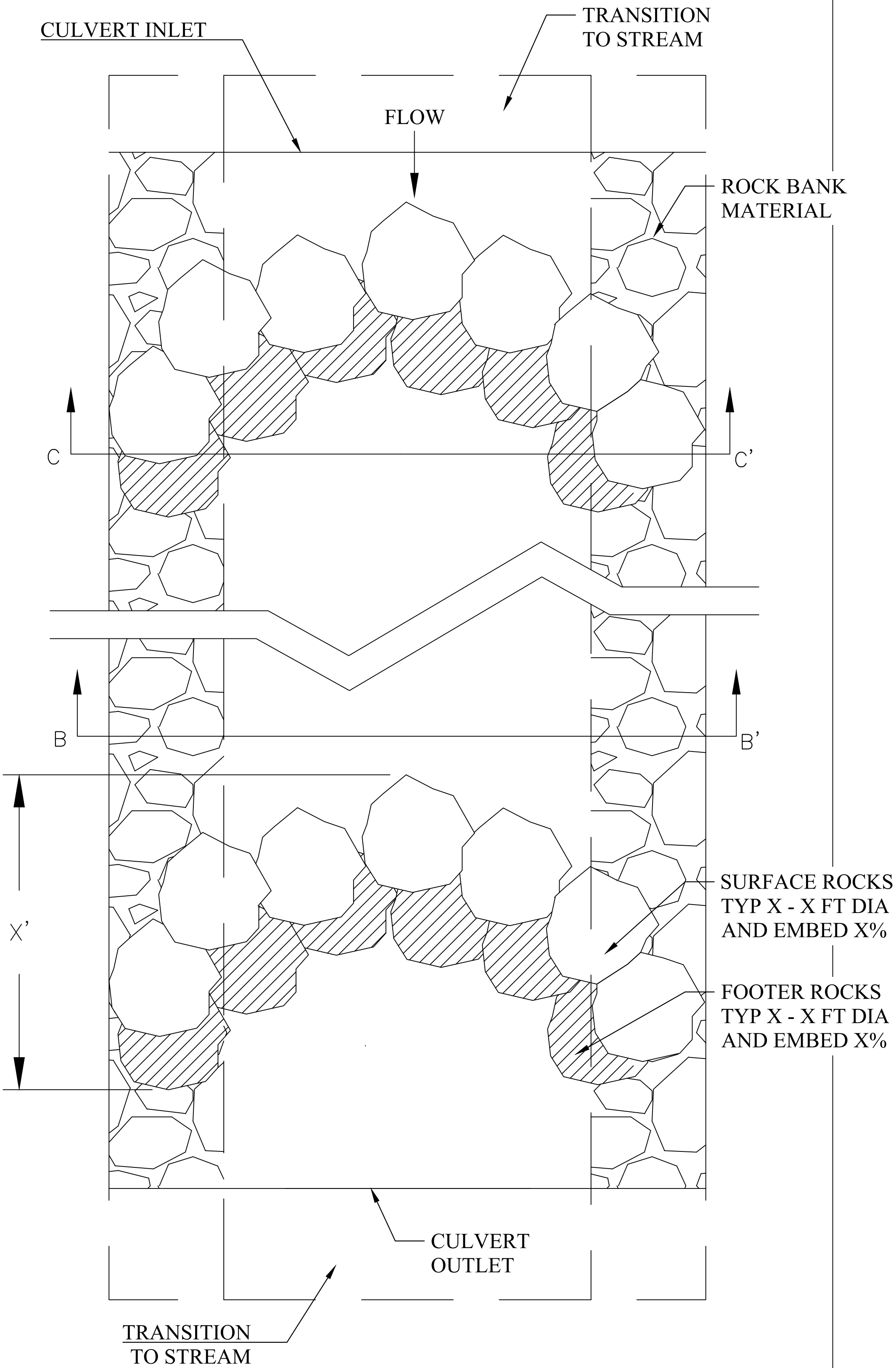
**ROCK WEIR PROFILE (TYPICAL)**

NOT TO SCALE



**CULVERT INFILL CROSS SECTION B - B' (TYPICAL)**

NOT TO SCALE



**CULVERT INFILL PLAN VIEW (TYPICAL)**

NOT TO SCALE

LITTLE GOLD CREEK NFSR 8501 MP 1.1 BEAVERHEAD-DEERLODGE NATIONAL FOREST				NEW CULVERT ROCK WEIR (TYP)		SUB-SHEET A6
DESIGNED ---	DRAWN E.RYAN	CHECKED ---	DATE 12/2019	DRAWING NO. ---	SHEET 6 OF 6	

**From:** [Brad Liermann](#)  
**To:** [McGree, Michelle](#)  
**Subject:** [EXTERNAL] RE: Little Gold Creek AOP PROPOSAL  
**Date:** Monday, June 1, 2020 12:59:36 PM

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Hey Michelle,

Yes, I am supportive of this project. This culvert is likely a complete barrier and is at least a partial barrier to juvenile WCT. There are a few cutthroat above the barrier but densities are low and do not extend very far above the culvert despite there being excellent fish habitat above. It is uncertain why WCT are not doing better above the barrier, but is likely partially due to the fact that this barrier is in place. There is also a micro-hydro diversion upstream of the culvert that also likely impacts the fishery, but the USFS and Clark Fork Coalition are working on improving that situation too. This project also provides nice cost share with the USFS RAC funds.

Unless I hear differently, this will serve as my letter of support. We will be doing some efishing this summer as my data is about 11 years old at this point on Little Gold, but I don't imagine this will change my mind too much on the project. Let me know if you would rather have an official letter and I can draft one this afternoon.

Thanks,  
Brad

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**From:** McGree, Michelle <MMcGree@mt.gov>  
**Sent:** Monday, June 1, 2020 7:21 AM  
**To:** Brad Liermann <liermann@blackfoot.net>  
**Subject:** RE: Little Gold Creek AOP PROPOSAL

Hi Brad,  
I see below that you are sending a support letter this week. I just wanted to underscore the importance of having one of those from you. Application packets will go out in the mail tomorrow and there will likely be an initial review without your support. If you could get me something ASAP – even if it's an email, it will be important for the project.

Unless of course the project isn't great, then it doesn't matter.  
Thanks,  
Michelle

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**From:** Will McDowell <[will@clarkfork.org](mailto:will@clarkfork.org)>  
**Sent:** Sunday, May 31, 2020 7:32 PM  
**To:** McGree, Michelle <[MMcGree@mt.gov](mailto:MMcGree@mt.gov)>  
**Subject:** [EXTERNAL] Little Gold Creek AOP PROPOSAL

Michelle; Please find attached the Future Fisheries proposal for Little Gold Creek AOP, prepared by Clark Fork Coalition. Paul Hooper, fish biologist for the Beaverhead Deer Lodge Forest, asked CFC to

partner with them on this project.

The match is USFS RAC money primarily. The project review for that is tomorrow Monday June 1 and Thursday June 4. By Thursday we should know about the match funding.

Brad Liermann said that he will be sending you his support letter this week.

Thank you, and let me know if you need anything else. Cheers.....Will

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